Application No.: 09/663,942

Attorney Docket No.: 5725.0290-01

Customer No.: 22,852

AMENDMENTS TO THE CLAIMS

Claims 1-9. (Cancelled)

10. (currently amended) A composition according to claim 1, A composition comprising, in a cosmetically acceptable support suitable for dyeing the hair, at least one direct dye and at least one crosslinked polymer containing acrylic residue units of the structure

in which R_1 denotes H, CH_3 or C_2H_5 , and C_{10} - C_{30} alkyl acrylate residue units, wherein said composition is a direct dyeing composition for the hair, wherein said at least one direct dye is an acid azo dye of formulae (I) or (I'):

$$SO_3M$$
 $N=N$
 NHR_1
 (I)

$$R_5$$
 $N = N - Z$ (I')

In which Z denotes (I')a or (I')b:

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$$R_3$$
 (I')a $(SO_3M)p$

in which:

n denotes zero or 1,

p denotes zero, 1 or 2,

M denotes H or an alkali or alkaline-earth counterion, an organic amine which may be hydroxylated or not hydroxylated, or ammonia,

R₁ denotes H, a C₁-C₄ alkyl radical or an cycloalkylaryl radical,

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R₂ denotes H, an -NH₂ radical, an -HN-CO-CH₃ radical or an -NHSO₂-phenyl radical,

R₃ denotes H, or a -N=N-(para-nitrophenyl) radical,

 R_4 denotes a H, a C_1 - C_4 alkyl radical, a C_1 - C_4 alkoxyl radical, or forms a naphtalenyl ring with the adjacent carbon atom which is unsubstitued of the phenyl group,

 R_5 denotes H, a C_1 - C_4 alkyl radical, an -SO $_3$ Na radical, a -NH $_2$ radical, an -HN-CO-CH $_3$ radical or an -NO $_2$ radical, and in which at least one -SO $_3$ M group is present in formulae (I), (I')a and (I')b.

11. (currently amended) A composition according to claim 1, A composition comprising, in a cosmetically acceptable support suitable for dyeing the hair, at least one direct dye and at least one crosslinked polymer containing acrylic residue units of the structure

$$CH_2 \longrightarrow C \longrightarrow C \longrightarrow OH$$
 $R_1 \longrightarrow O$

in which R_1 denotes H, CH_3 or C_2H_5 , and C_{10} - C_{30} alkyl acrylate residue units, wherein said composition is a direct dyeing composition for the hair, wherein said at least one direct dye is a cationic azo dye of formulae (II), (III), (IV), (V), (VI), (VI), (VII) and their mesomeric forms, wherein

(i) dyes of formulae (II) and (III) are:

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$$R_1$$
 R_2
 R_3
 R_4
 R_4
 R_4
 R_4
 R_4
 R_4
 R_4

$$R_4$$
 R_4
 R_4

in which

R₁ denotes H or an -NH₂ radical,

R₂ denotes H or a -NO₂ radical,

R₃ denotes H or a -NO₂ radical or an C₁-C₄ alkoxyl radical,

R₄ denotes a C₁-C₄ alkyl radical,

X denotes an anion chosen from chloride, methyl sulphate and acetate, wherein;

(ii) dyes of formulae (IV), (V), (VI), (VI'), (VII) include:

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a) the compounds of formula (IV):

$$A \longrightarrow N \longrightarrow N \longrightarrow R_5$$

$$X \longrightarrow R_7$$

$$R_6$$

$$R_7$$

$$R_7$$

in which:

 R_5 and R_6 , which may be identical or different, denote a hydrogen atom, C_1 - C_4 alkyl radicals which can have a substituent chosen from -CN, -OH and -NH₂ radicals, and a 4'-aminophenyl radical, or form, with a carbon atom of the benzene ring, a heterocycle, oxygenated and/or nitrogenated and optionally having at least one substituent chosen from C_1 - C_4 alkyl radicals,

R₇ and R'₇ which may be identical or different, denote a hydrogen atom, a halogen atom chosen from chlorine, bromine, iodine and fluorine, a cyano radical, a C₁-C₄ alkyl radical, a C₁-C₄ alkoxy radical, or an acetyloxy radical,

 X^{-} denotes an anion chosen from chloride, methyl sulphate and acetate; A is a group chosen from structures A_1 to A_{19} :

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$$R_8$$
 R_8 R_8 R_8 R_8 R_8 R_8 R_8

$$R_8$$
 R_8
 R_8
 R_8
 R_8
 R_8
 R_8
 R_8
 R_8
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 R_8

$$R_8$$
 R_8
 R_8

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$$R_8$$
 R_8
 R_8

$$R_8$$
 R_8
 R_8

A₁₃ A₁₄

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in which,

and

R8 denotes a $C_{1\text{-}}C_4$ alkyl radical which can be substitued with a hydroxyl radical and

R9 denotes a C₁.C₄ alkoxy radical,

b) the compounds of formula (V):

$$R_{12}$$
 R_{10}
 R_{11}
 R_{13}
 R_{13}

in which:

 R_{10} denotes hydrogen or a C_1 - C_4 alkyl radical,

 R_{11} denotes hydrogen or a C_1 - C_4 alkyl radical optionally having a substituent chosen from a -CN radical, an amino radical, and a 4'-aminophenyl radical, or forms with R_{10} a heterocycle, oxygenated and/or nitrogenated and optionally having at least one substituent chosen from a C_1 - C_4 alkyl radical,

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 R_{12} and R_{13} , which may be identical or different, denote a hydrogen atom, a halogen atom chosen from bromine, chlorine, iodine or fluorine, a C_1 - C_4 alkyl radical, a C_1 - C_4 alkoxy radical, or a -CN radical,

X⁻ denotes an anion chosen from chloride, methyl sulphate and acetate;

B is a group chosen from structures B1 to B6:

$$R_{14}$$
 R_{14}
 R_{15}
 R_{16}
 R_{16}
 R_{17}
 R_{18}
 R_{19}
 R_{19}
 R_{19}
 R_{11}
 R_{11}
 R_{12}
 R_{13}
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 R_{12}
 R_{13}
 R_{14}
 R_{15}
 R

in which,

 R_{14} denotes a $C_{1\text{-}}C_{4}$ alkyl radical, and

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 R_{15} and R_{16} , which may be identical or different, denote a hydrogen atom or a C_1 . C_4 alkyl radical;

c) the compounds of formulae (VI) and (VI'):

$$E-N=N-(N)_{m}$$

$$R_{18}$$

$$R_{19}$$

$$R_{20}$$

$$(VI)$$

$$(VI')$$

in which:

 R_{17} denotes a hydrogen atom, a C_1 - C_4 alkoxy radical, a halogen atom chosen from bromine, chlorine, iodine and fluorine, an unsubstitued amino radical, or a substitued amino radical,

 R_{18} denotes a hydrogen atom, a C_{1} - C_{4} alkyl radical, or forms with a carbon atom of the benzene ring, a heterocycle which is optionally oxygenated and optionally having at least a substituent chosen from a C_{1} - C_{4} alkyl radical,

 R_{19} denotes a hydrogen atom or a halogen atom chosen from bromine, chlorine, iodine and fluorine,

 R_{20} and R_{21} , which may be identical or different, denote a hydrogen atom or a C_1 - C_4 alkyl radical,

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m is zero or 1,

X denotes an anion chosen from chloride, methyl sulphate and acetate;E is a group chosen from structures E1 to E8:

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in which

R' denotes a C₁₋C₄ alkyl radical,

when m is 0, then E can also be a group of structure E9:

in which,

R' denotes a C₁₋C₄ alkyl radical,

d) the compounds of formula (VII):

$$G \longrightarrow N \longrightarrow N \longrightarrow J \qquad (VII)$$

in which,

the symbol G represents a group chosen from structures G1 to G3:

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$$R_{24}$$
 R_{25}
 R_{24}
 R_{25}
 R_{24}
 R_{25}
 R

in which,

 R_{22} denotes a C_1 - C_4 alkyl radical or a phenyl radical optionally having a substituent chosen from a C_1 - C_4 alkyl radical and a halogen atom chosen from chlorine, bromine, iodine and fluorine,

 $R_{23}\ denotes\ a\ C_{1\text{-}}C_{4}\ alkyl\ radical\ or\ a\ phenyl\ radical,$

 R_{24} and R_{25} , which may be identical or different, denote a C_1 - C_4 alkyl radical or a phenyl radical or, in the case of structure G_1 , can together form a benzene ring having at least one substituent chosen from a C_1 - C_4 alkyl radical, a C_1 - C_4 alkoxy radical and an -NO₂ radical, and in the case of structure G_2 , can together form a benzene ring optionally having at least one substituent chosen from a C_1 - C_4 alkyl radical, a C_1 - C_4 alkoxy radical and an -NO₂ radical, wherein R_{24} can also denote a hydrogen atom,

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Z denotes chosen from an oxygen atom, a sulphur atom or an -NR₂₃ radical;

M denotes a -CH radical, a -CR radical wherein R is chosen from a C_{1} - C_{4} alkyl radical, or an -NR₂₆(X⁻)_r radical, wherein r is zero or 1,

K denotes a -CH radical, a -CR radical wherein R is chosen from a C_1 - C_4 alkyl radical, or an -NR₂₆(X⁻)_r radical wherein r is zero or 1,

P denotes a -CH radical, a -CR radical wherein R is chosen from a C_1 - C_4 alkyl radical, or an -NR₂₆(X⁻)_r radical wherein r is zero or 1,

R₂₆ denotes an oxygen atom, a C₁₋C₄ alkoxy radical or a C₁₋C₄ alkyl radical,

 R_{27} and R_{28} , which may be identical or different, denote a hydrogen atom, a halogen atom chosen from chlorine, bromine, iodine and fluorine, a $C_{1-}C_{4}$ alkyl radical, a $C_{1-}C_{4}$ alkoxy radical or an -NO₂ radical,

X denotes an anion chosen from chloride, iodide, methyl sulphate, ethyl sulphate, acetate and perchlorate, and

wherein at least one of K, M or P denotes $-NR_{26}(X^-)_r$, wherein the symbol J is chosen from:

(a) a group of structure J₁:

$$R_{31}$$
 R_{30}

in which,

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 R_{29} denotes a hydrogen atom, a-halogen atom chosen from chlorine, bromine, iodine and fluorine, a C_1 - C_4 alkyl radical, a C_1 - C_4 alkoxy radical, a -OH radical, an -NO₂ radical, an -NHR₃₂ radical, an -NR₃₃R₃₄ radicals, an -NHCO(C_1 - C_4)alkyl radical, or forms with R_{30} a 5- or 6-membered ring which may contain at least one hetero atom chosen from nitrogen, oxygen and sulphur,

 R_{30} denotes a hydrogen atom, a halogen atom chosen from chlorine, bromine, iodine and fluorine, a C_{1} - C_{4} alkyl radical, a C_{1} - C_{4} alkoxy radical, or forms, with R_{31} or R_{32} a 5- or 6-membered ring which may contain at least one hetero atom chosen from nitrogen, oxygen and sulphur,

 R_{31} denotes a hydrogen atom, an -OH radical, an -NHR $_{32}$ radical or an -NHR $_{33}$ R $_{34}$ radical,

R₃₂ denotes a hydrogen atom, a C₁₋C₄ alkyl radical, a C₁₋C₄ monohydroxyalkyl radical, a C₂₋C₄ polyhydroxyalkyl radical or a phenyl radical,

 R_{33} and R_{34} , which may be identical or different, denote a C_1 - C_4 alkyl radical, a C_1 - C_4 monohydroxyalkyl radical or a C_2 - C_4 polyhydroxyalkyl radical, and

- (b) a 5- or 6-membered nitrogenous heterocyclic group which can contain at least one other hetero atom and/or at least one carbonyl group and which can have at least one substituent chosen from a C₁₋C₄ alkyl radical, an amino radical or a phenyl radical.
- 12. **(original)** A composition according to claim 11, wherein said 5- or 6-membered nitrogenous heterocyclic group is chosen from a group of structure J₂:

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in which,

 R_{35} and R_{36} , which may be identical or different, denote a hydrogen atom, a C_1 . C_4 alkyl radical, or a phenyl radical,

Y denotes a -CO- radical or a radical

wherein n = 0 or 1, where, when n denotes 1, U denotes a -CO- radical.

13. (cancelled)

14. (currently amended) A composition according to claim 1, A composition comprising, in a cosmetically acceptable support suitable for dyeing the hair, at least one direct dye and at least one crosslinked polymer containing acrylic residue units of the structure

$$CH_2 = C - C - OH$$
 $R_1 = 0$

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in which R_1 denotes H, CH_3 or C_2H_5 , and C_{10} - C_{30} alkyl acrylate residue units, wherein said composition is a direct dyeing composition for the hair, wherein said at least one direct dye is a cationic anthraquinonic dye of formula (IX):

in which:

 R_1 denotes a hydrogen atom, a -OH radical, a -NH $_2$ radical, or a -NH(C_1 - C_4)alkyl radical,

 R_2 denotes a -(CH₂)_nNR₃R₄(R₅)_m- radical, in which n denotes 1 or 10, m denotes zero or 1, and

 R_3 , R_4 , R_5 which may be identical or different, denotes a hydrogen atom or a C_{1-} C_4 alkyl radical, and

wherein R₃ and R₄, with the nitrogenous atom, can form a 5- or 6-membered heterocycle group which can contain at least one other hetero atom chosen from nitrogen, oxygen or sulphur and optionally having at least one substituent chosen from C₁.C₄ alkyl radicals, amino radicals, and phenyl radicals.

Claims 15-27. (Cancelled)